The ED2GP (emergency department to general practice) for Women study: understanding lower follow-up rates among older women


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Abstract. Older women seem to have lower GP follow-up rates after an emergency department (ED) discharge than men. This qualitative study investigated how older women seek GP follow up after an ED visit. In 2018, women aged ≥65 years were recruited from an ED in a suburban hospital in south-western Sydney, Australia, and then contacted 1 week later for a telephone interview exploring factors associated with their follow-up behaviour. Grounded theory was used to construct a potential explanatory model of follow-up behaviours. Of the 100 women recruited, 64% had attended a GP follow up by Day 7, as instructed. The balance of perceived cost and benefit of GP follow up emerged as a useful model to understand the factors affecting follow-up behaviour. Perceived costs included inconvenience caused to self and others, access to transport options and the availability of a patient’s GP. Perceived benefits included previous experiences with the healthcare system, pre-existing health-seeking behaviours and ED messaging. Our findings suggest that follow-up rates could be improved by strengthening the perceived benefit of GP follow up at the point of ED discharge, in addition to addressing perceived costs. Approaches may include ensuring discharge instructions are purposeful and given in the company of an older woman’s social supports.

Keywords: community health care, delivery of health care: integrated, emergency medical services, health behaviour, health transition.

Introduction
Australia’s population is aging (Australian Bureau of Statistics (ABS) 2016b). In 2016–17, people aged ≥65 years and older accounted for one-fifth of presentations to emergency departments (EDs) across Australia (Australian Institute of Health and Welfare (AIHW) 2018a). When older people are discharged from the ED, older women are less likely to follow up with their GP than their male counterparts (67% vs 90% respectively; Watson et al. 2017).

Poor transition between modes of health care have negative effects on patient safety and quality of care, and can lead to readmissions to the ED (Lowthian 2017). Factors that affect the transition of care between the ED and general practice have been studied for the general population (Atzema and Maclagan 2017). Recognised factors include how well patients know their GP (Dinh et al. 2005; Yang et al. 2010), patient understanding of discharge follow-up instructions (Yang et al. 2010; Qureshi et al. 2012), access to transport (Naderi et al. 2012; Watson et al. 2017) and social support (Yang et al. 2010; Watson et al. 2017).

The evidence is less clear for older women. Although it is commonly reported that, in general, women use health services at higher rates than men (Verbrugge 1985; Parslow et al. 2004), this may vary considerably depending on setting and context. For example, a recent large trans-European study demonstrated constraining patterns of health service use by gender in some countries (Detollenaere et al. 2017). Cost (Jatrina and Crampton 2012), transport difficulty (Missik 2001; Hippisley-Cox et al. 2006) and cultural expectations around social roles of care in the home (Allen 1994) and society (Gove 1984) affect access to care. There has been little specific research regarding the transition of care between the ED and general practice for older women.
The ED2GP (emergency department to general practice) for Women study sought to investigate this phenomenon in a suburban hospital in south-western Sydney (SWS) in New South Wales (NSW), Australia. The primary aim was to understand how women aged ≥65 years sought GP follow up after discharge from the ED.

Methods
This was a qualitative descriptive study using a grounded theory approach (Corbin and Strauss 2015) to analyse data collected from structured and semistructured interviews. A grounded theory approach was chosen because it is well suited to understanding the behaviours, thoughts and emotions of people within their sociocultural context (Corbin and Strauss 2015). The assumptions held by the clinician investigators were that ‘explanatory factors’ would ‘emerge’ in the analyses, with the acknowledgement that these were constructed by their interactions with the patient participant data.

Context
The Fairfield Local Government Area (LGA) is in SWS, NSW. Nearly 60% of residents in this LGA were born overseas, 75% of households speaking a language other than English and approximately 14% of residents are >65 years of age. Of people aged at least 65 years, 53% are female, with this increasing to 61% of those aged ≥85 years (ABS 2016a). The district has high rates of socioeconomic disadvantage, with one of the lowest median weekly incomes in Australia and a high unemployment rate. Fairfield has the largest number of humanitarian arrivals (including refugees and asylum-seekers) than any other LGA in NSW, taking in almost 12 000 arrivals between 2012 and 2017 (Department of Social Services 2017). Fairfield Hospital is a district hospital with 220 inpatient beds. In 2017–18, almost 36 000 patients presented to Fairfield ED (AIHW 2018b). Two of the authors (CT and AK) are clinical academic GPs employed by the SWS Local Health District (which runs the local hospital services), another two (LZ and SH) are medical student researchers and the remaining three (JP, LB and BP) are clinical staff of the Fairfield ED.

Participants
Research participants were recruited from the patients attending the Fairfield Hospital ED between May and July 2018. A structured interview was completed during the ED visit before discharge. This was followed by a telephone interview between Days 8 and 14 after discharge that included structured and semistructured questions. Participant demographic details were collected from the ED electronic health record system. Where a language barrier was encountered, participants could opt to use a support person as an ad hoc interpreter or to speak on their behalf. Inclusion criteria were female sex, age ≥65 years, admitted to the ED with an Australian Triage Score (ATS) of 3, 4 or 5, discharged from the ED directly back into community and receiving an explicit GP follow-up instruction in the discharge summary.

Participants were purposively recruited from patients presenting on both weekdays and weekends, as well as during the day, after-hours and overnight. The recruitment goal of 100 participants was chosen for two reasons: (1) enough qualitative data from the structured and semistructured responses were expected to approach theoretical saturation for the primary aim; and (2) this goal was pragmatically within the limited funded and in-kind resources available for this study.

PredischARGE structured interview
Eligible participants were approached in the ED by medical student researchers (LZ and SH). Participants who consented completed a structured interview that included basic identifiers and contact details, demographic questions, questions about how the participant accessed GP services and the patient’s intention to follow up with her GP in the coming week.

Telephone interview
Up to five attempts were made to contact participants by telephone for interviews that included structured and semistructured questions. These interviews were undertaken by the medical student researchers (LZ and SH). Participant responses were captured by the interviewers onto paper data collection sheets, including direct quotations, field notes and summaries for the responses to the semistructured questions. The interviews all started with standard structured questions including, ‘Have you followed up with a GP?’ and then explored beliefs, attitudes and experiences related to GP follow up (Box 1).

Data analysis
The data collection sheets were transcribed to electronic textual data and imported into NVivo 12 (QSR International Pty Ltd, Melbourne, Vic., Australia) software for analysis. Data from the

Box 1. Telephone interview questions

| Have you followed up with a GP – and if so, when, and whom did you see? |
| Did you receive a printed discharge summary on leaving the [emergency department]? |
| If you did not follow up, why was this different to your original intentions? |
| If you saw a different GP, why did you see someone different? |
| What kind of things in your life made (or make) it easier for you to see your GP? |
| What would make following up with your GP easier? |
| Are there any issues that made it (or can make it) harder for you to see the GP? |
| For people like yourself, what do you think are potential barriers? |
first 15 participants were coded and categorised into prospective concepts and categories independently by two coders (SH and LZ). These were discussed and explored in a group investigator meeting, with a focus on developing and exploring early potential interpretations of the data. One author (SH) then proceeded with the coding of all 100 participant responses in three stages using open coding, axial coding and selective coding (Corbin and Strauss 2015). The analysis involved the comparison of codes within various concepts, memo notes, matrix coding queries and the evolution of explanations from prior meetings.

The first stage involved identification of line-by-line ‘in vivo’ codes (i.e. direct phrases or sentences from field notes) before coding them further into concepts and categories. The second stage involved abstracting the clusters of concepts and categories into higher-level categories and themes. Finally, three authors (SH, CT and AK) met weekly to fortnightly during the third stage to form relationships between the core concepts and categories as maps. Drawn diagrams were used to explore the developing model in these meetings. The final model was agreed by consensus by these three investigators and shared with the research team for discussion and approval.

**Ethics approval**

Ethical approval for the study was obtained from the South Western Sydney Local Health District’s Research and Ethics Office (HE18/033 LNR).

**Results**

In all, 176 patients were recruited from the ED, but 69 did not meet the inclusion criteria (49 admitted as an inpatient, 20 did not receive GP follow-up instructions on their discharge summary). Of the 107 eligible patients, four could not be contacted via telephone and three withdrew from the study, leaving 100 participants in the study.

**Participants**

The mean age of the participants was 77 years, approximately half were married (47% married, 46% widowed, 7% single) and one-third of the telephone interviews were conducted through a family relative (Table 1). The telephone interviews were roughly 15–20 min long. Although English was the single most frequently spoken language, two-thirds of participants spoke a language other than English at home. The Semitic languages (including Arabic and Neo-Aramaic) were the most common, with other participants speaking Spanish, Italian, Croatian, Chinese and Vietnamese.

Only 64% of participants had attended a GP follow up by Day 7 after discharge. Of those who had seen a GP, most (92%) attended the same GP or clinic that was reported as their intention in the ED structured interview. In contrast, only 80% of discharge summaries were addressed to the same GP or clinic, with most of the discrepancy (15%) due to the addressee being listed as ‘no GP’. Most participants were27% and a few received a home visit (3%).

**Qualitative results**

We constructed a model that potentially explains factors affecting GP follow-up behaviour among older women after an ED admission (Fig. 1). These behaviours can be understood using a ‘balance’ of perceived costs and benefits to attend follow up. It seemed that where the balance between the perceived cost and perceived benefit of GP follow up was favourable, participants would describe GP attendance. In contrast, where the balance was unfavourable, the participants would describe non-attendance. There were subcategories within the major categories of ‘perceived cost of GP follow up’ and ‘perceived benefit of GP follow up’, variations in which may increase or decrease the cost or benefit respectively. These, in turn, may affect the balance and influence behaviour.

Note, the ‘quotations’ below are from the field notes captured by the interviewer, with participant details and who spoke for the participant provided in brackets.

**Perceived cost of GP follow up**

There were four important subcategories under this major category, namely inconvenience to self, access to transport options, perceived inconvenience to others and GP availability.

**Inconvenience to self.** Attending a GP follow-up visit was perceived as a potential personal inconvenience. Some participants described the presence of other responsibilities, including caring for an unwell family member or attending other health appointments:

**Table 1. Participant demographics**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>Mean ± s.d.</td>
<td>77 ± 8</td>
</tr>
<tr>
<td>Range</td>
<td>66–96</td>
<td></td>
</tr>
<tr>
<td>Married (%)</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Speak language other than English at home (%)</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>No. years living in Australia</td>
<td>Mean ± s.d.</td>
<td>49 ± 25</td>
</tr>
<tr>
<td>Range</td>
<td>2–96</td>
<td></td>
</tr>
<tr>
<td>Person contacted for interview (%)</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Participant directly</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Female relative</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Median no. visits to GP in past 12 months</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>ED care</td>
<td>ATS 1</td>
<td>55</td>
</tr>
<tr>
<td>ATS 4</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>ATS 5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Mean time spent in ED (min)</td>
<td>281</td>
<td></td>
</tr>
<tr>
<td>GP follow up</td>
<td>Intention to attend GP follow up while in ED (%)</td>
<td>Yes</td>
</tr>
<tr>
<td>Maybe</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Follow-up rate by Day 7 after discharge (%)</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Reported receiving a discharge summary from ED (%)</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>Reported giving discharge summary to GP (%)</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Same GP or clinic seen by patient vs recorded follow-up intention (%)</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Same GP or clinic listed on discharge summary vs recorded follow-up intention (%)</td>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>
[My] husband isn’t well, has cancer, and so [I’m] often taking care of him [Participant 50; spoke for self].

Other participants were restricted specifically by their physical immobility and pain:

Mobility is reducing and travelling gets more tiring [Participant 97; spoke for self].

These participants often attested to the perceived need of GP home visits. Long waiting times at the clinic and extended travel time were also noted as time burdens.

The converse was also reported, with participants more likely to follow up with their GP if they lived closer or had already planned to return for a routine appointment.

Access to transport options. Many participants depended on family, friends or neighbours to help them travel to their GP. However, some participants expressed the opinion that their family was too far or busy to help when needed:

Daughter is supportive but lives far away [Participant 28; spoke for self].

Less commonly, other modes of transport were used. Participants had mixed opinions about the accessibility of public transport:

By the time she [the participant] gets to the GP, half the day is wasted [Participant 32; granddaughter spoke on her behalf].

Many reported negative experiences with community transport:

Community transport needs a week’s booking in advance [Participant 19; daughter spoke on her behalf].

Many stated positive experiences with discounted taxi services:

I can get a taxi…[half-price subsidy] [Participant 67; son spoke on her behalf].

Perceived inconvenience to others. The reliance on others was not only for transport, but also for social support (e.g. ad hoc interpreting when the GP did not speak their language). Many of the same patients described a tension between the cultural expectations that their immediate family should provide this support, noting the benefits of them being present and yet not wanting to inconvenience these same people.

She [the participant] expects her own children to take her to see the GP while they’re alive, after all the work she has done in raising them [Participant 48; spoke for self].

My four children…they have their own life [Participant 5; spoke for self].

GP availability. Participants provided mixed opinions regarding their ability to book appointments with their GP, for example because their GP was on holidays or the lack of available appointment time options when their social supports could help.

Some participants described strategies to getting an appointment, including ringing early and communicating the need for follow up with their GP as instructed by the ED:

Got an appointment earlier because she rang before 7:45am and told the reception that she has to see the GP in 2 days [Participant 92; daughter spoke on her behalf].

However, in most cases when participants had difficulty finding an appointment with their regular GP, they waited until the next available appointment, even if it was after 7 days. This often seemed to be the case for participants who spoke a language other than English at home.

Perceived benefit of GP follow up

Previous experiences with the healthcare system. Most participants had positive relationships with their GP, which motivated their desire to attend follow up, regardless of costs:

She [the participant] can see other GPs closer to home, but she trusts [regular GP] more based on her past experiences [Participant 97; spoke for self].

A few participants spoke about negative experiences with the healthcare system that deterred them from wanting to follow up with their GP:

She [the participant] had an unpleasant experience in the ED and this has demotivated her from listening to the
shown to positively affect health behaviour (Boudreaux et al. 2012). In contrast, ED discharge instructions that are perceived to underemphasise the role of the GP follow up for them for the current clinical scenario. ‘ED messaging’ emerged as a teachable moment’, and deliberate messaging by ED doctors has been identified as a ‘teachable moments’ model, with some participants directly attributing this to their ED messaging. The importance placed on the GP follow-up instruction should first be purposeful to the participant. Patients should optimally be supported to understand the role of the GP follow up for them for the current clinical scenario. ‘ED messaging’ emerged as an important subcategory in the model, with some participants directly attributing this to their behaviours. The importance placed on the GP follow-up instructions by ED staff during discharge planning may motivate patients to attend. ED visits have been identified as a ‘teachable moments’ model, with some participants directly attributing this to their ED messaging. The importance placed on the GP follow-up instruction should first be purposeful to the participant. Patients should optimally be supported to understand the role of the GP follow up for them for the current clinical scenario. ‘ED messaging’ emerged as an important subcategory in the model, with some participants directly attributing this to their behaviours. The importance placed on the GP follow-up instructions by ED staff during discharge planning may motivate patients to attend. ED visits have been identified as a ‘teachable moments’ model, and deliberate messaging by ED doctors has been shown to positively affect health behaviour (Boudreaux et al. 2012). In contrast, ED discharge instructions that are perceived as tokenistic may have a counterproductive effect: patients may infer an unintended message that follow up is unnecessary (Qureshi et al. 2012).

In addition, there may be benefit in sharing follow-up instructions collaboratively with the patient’s social supports. The present study revealed that older women relied on their family and close friends for assistance with GP follow-up visits, especially for transport. There was an understandable and clear preference among the women to receive support from their social network, from family and friends, rather than from more impersonal providers, such as taxis and interpreters. However, the social and relational context of support also meant that older women may be reluctant to inconvenience these very same people. This is consistent with and illuminates a previous finding in a similar population, namely that older people who reported that they had fewer ‘relatives’ they feel close to such that you can call on them for help’ in a social isolation questionnaire (Lubben 1988) were less likely to attend GP follow up after an ED discharge (Watson et al. 2017). It is not merely the presence or absence of social support that is important, but also the nature of the relationships. These contexts may be complex for older women, especially within cultural settings where expectations of family roles and caring responsibilities are gendered (Gove 1984; Allen 1994). Delivering discharge instructions collaboratively, in the company of an older woman’s social supports, may obviate the patient’s potential guilt or reluctance to inconvenience her family and close friends.

**Strengths and limitations**

The grounded theory method was well suited to explore and provide a deeper understanding of the phenomena of interest. Although much of the analysis was undertaken by a student researcher, he was extensively supported by experienced qualitative researchers in clinical practice at the interface between hospitals and general practice, as well as a senior clinical emergency medicine team, to explore the sociological phenomena of factors influencing the follow-up behaviour of older women. There was adequate qualitative data from the 100 participants for theoretical saturation to have been met. This study built on prior research in this area of Sydney (Yang et al. 2010; Watson et al. 2017).

The study did have limitations. Importantly, where language difficulties were encountered, nominated family members were used as ad hoc interpreters rather than professional health interpreters. It is probable that this introduced a source of bias. It is plausible that the theme of relationship sensitivities may be underemphasised in our data and analysis. One of the interviewers (SH) was male, and perceived that some of the participants may have been more guarded in their responses compared with the responses to the female interviewer (LZ), particularly for non-English speakers. Funding and resource availability meant that field notes were used to capture participant data rather than the use of audio recordings and transcriptions.

**Conflicts of interest**

The authors declare no conflicts of interest.

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